# INFORMATION LETTER

Not for Publication

## NATIONAL CANNERS ASSOCIATION For Members Only

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Washington, D. C.

December 2, 1950

## Canners' Most Critical Problem To Be Manpower, Heiney Says

Manpower to help produce the nation's canned foods is looming up as the canning industry's most critical problem for 1951, the Illinois Canners Association was told this week by R. B. Heiney, Assistant to the Secretary of the N.C.A.

Forecasts by the U. S. Department of Labor point to a labor force of 66,000,000 persons by next July, not including the contemplated 3,000,000-man strength of the armed forces, with unemployment at a minimum level of 1,000,000.

This means that about 2,500,000 women not now in the labor force must be recruited and that about 400,000 workers will have to be brought into the U. S. from other countries, Mr. Heiney reported.

He reported that some farm labor employers had indicated that it may be necessary for Congress to institute an agricultural manpower program similar to that of World War II, when foreign laborers were brought into the country under contract and transported and housed under federal supervision.

Even with a government program, Mr. Heiney said, it will be difficult to find the 320,000 foreign agricultural workers estimated by a special Labor Department Agricultural Committee to be needed for next year's harvest.

An increase in the size of the armed forces above the 3,000,000-man mark would complicate the supply problem further, and the need for selective service deferment for occupational reasons will develop, Mr. Heiney predicted.

Mr. Heiney also reviewed the proposed program for the final session of the 81st Congress which convened this week

## 1950 Pack of Canned Peaches

The 1950 pack of 17,735,136 actual cases of canned peaches is 2,683,533 cases smaller than the 20,418,669 cases packed in 1949, according to a report by the Association's Division of Statistics. The 1949 and 1950 packs of peaches, by states, are tabulated on page 331.

# N.C.A. Appears before House Committee On Chemicals in Processed Foods

Dr. E. J. Cameron, Director of the N.C.A. Washington Research Laboratories, testified yesterday before a Congressional committee that canned foods are little involved in the problem of added chemicals now attracting interest in many circles. Dr. Cameron's statement was presented to the select House Committee to Investigate the Use of Chemicals in Food Products. The Committee is concerned both with chemicals added as ingredients and those which may be added inadvertently. It will consider whether an amend-

ment to the Food, Drug, and Cosmetic Act should be recommended for closer control of such additions.

President Urges Enactment Of Clayton Act Amendment

The Celler bill, H. R. 2734, on which the N.C.A. last year filed a brief on behalf of the canning industry, is among the bills which President Truman believes should be passed by the 81st Congress.

H. R. 2734 would amend the Clayton Act by prohibiting the acquisition by one corporation of the assets of another corporation where the effect of such acquisition may be substantially to lessen competition.

In listing legislation before the short session of the 81st Congress, the Presi-

(Please turn to page 336)

## **Necessity Certificates Issued**

The National Security Resources Board has announced the issuance of the first necessity certificates permitting accelerated tax amortization of facilities which intend to produce for defense purposes.

Eight such certificates were issued to Jones and Laughlin Steel Corp., and involved new facilities estimated to cost approximately \$144,000,000. According to the company's report to the NSRB, the proposed expansion will result in the increase of steel ingot capacity by 1,200,000 tons, coke and related by-products by 266,400 tons, and electrolytic tin plate by 168,000 tons.

Many other companies have made application to take advantage of the tax provision and will likewise receive decisions within a short time, NSRB's announcement stated. As to ingredients of canned foods, Dr. Cameron pointed out that in the majority of cases these are already controlled either by the standards of identity or by enforcement of the Meat Inspection Act. He indicated, however, that the canning industry would welcome an arrangement for advance screening of new pesticides, and stated also that the suggested use of antibiotics for food preservation raises an interesting question as to controls afforded by existing provisions of the Food, Drug, and Cosmetic Act.

The Committee is under the chairmanship of Representative Delaney (N.Y.) and also includes Representatives Abernethy (Miss.), Hedrick (W-Va.), Jones (Mo.), Keefe (Wis.), Miller (Nebr.), and McDonough (Calif).

The text of Dr. Cameron's statement is reproduced in full beginning on page 333.

#### **Price Stabilizer Named**

Michael V. DiSalle, mayor of Toledo, Ohio, was named by President Truman on November 30 to be Director of Price Stabilization. He will work under Dr. Alan Valentine, Economic Stabilization Administrator, in the administration of the economic controls program authorized by the Defense Production Act. These positions were created by Sections 401 and 402 of Executive Order 10161 of September 9 (see Information Letter of September 16, page 276).

## DEATH

## First Editor of Letter Dies

Robert Heinl, 70, who was the first editor of the N.C.A. INFORMATION LETTER in 1923-24, died of a heart attack November 26 while dining in a Washington restaurant. A veteran newspaperman, who had served on the staffs of the Terre Haute Tribune, New York Sun, Washington Post, and the former Leslie Weekly, Mr. Heinl was principally known as director of the Heinl News Service for 26 years. When the INFORMATION LETTER was established by the Association in 1923, Mr. Heinl was placed in charge. He supervised its publication for the first two years of its existence.

### Invitations for Bids

Quartermaster Purchasing Offices—1819 West Pershing Road, Chicago 9, Ill.; Oakland Army Base, Oakland 14, Calif.

Veterans Administration—Procurement Division, Veterans Administration, Wash. 25, D. C.

The Walsh-Healey Public Contracts Act will apply to all operations performed after the date of notice of award if the total value of a contract is \$10,000 or over.

The QMC has invited sealed bids to furnish the following:

Sours—quantities of vegetable-beef, cream of tomato, cream of pea, and cream of mushroom soups, all condensed, in No. 1 cans. Bids due in Chicago by Dec. 4 (QM-11-009-51-1258).

FRUIT JELLEE-quantities in No. 10 cans. Bids due in Chicago by Dec. 6 (QM-11-000-51-1255).

GRAPHERUIT—quantities in No. 2 cans. Bids due in Chicago by Dec. 6 (QM-11-009-51-1176).

Posse AND GRAVY—quantities in 30-cs. cans.

PORK AND GRAVY—quantities in 30-oz. cans. Bids due in Chicago by Dec. 7 (QM-11-009-51-1206).

HAM CHUNKS—quantities in 30-os. cans. Bids due in Chicago by Dec. 7 (QM-11-009-51-1207).

GRAPEFRUIT JUICE—quantities in No. 2 and 46-oz, cans. Bids due in Chicago by Dec. 7 (QM-11-009-51-1216).

GRAPEPRUIT—quantities in No. 2 and 46-os. cans. Bids due in Chicago by Dec. 11 (QM-11-009-51-1172, -1177, -1180 and -1215).

BEANS WITH PORK—quantities in No.  $3\frac{V_2}{cans}$ . Bids due in Chicago by Dec. 12 (QM-11-009-51-1279).

GRAPEFRUIT JUICE—quantities in No. 2 and 46-os. cans. Bids due in Chicago by Dec. 12 (QM-11-009-51-1171, -1217 and -1218).

CHILI CON CARNE—quantities in No. 10 cans. Bids due in Chicago by Dec. 12 (QM-11-009-51-1203).

LUNCHEON MEAT—quantities in 6-lb, cans. Bids due in Chicago by Dec. 12 (QM-11-009-51-1204).

VIENNA SAUSAGE—quantities in 24-oz. cans. Hids due in Chicago by Dec. 14 (QM-11-009-51-1205).

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Conned Berr quantities in 6-ib, rectangular or 6-ib, 10-oz, round cans. Bids due in Chicago by Dec. 14 (QM-11-009-51-1222).

BLENDED JUICE—quantities in No. 2 and 46oz. cans. Bids due in Chicago by Dec. 14 (QM-11-009-51-1219 and -1220).

BLENDED JUICE—quantities in No. 2 and 46oz. cans. Bids due in Chicago by Dec. 15 (QM-11-009-51-1230 and -1233). ORANGE JUICE—quantities in 46-or, cans. Bids due in Chicago by Dec. 15 (QM-11-009-51-1226).

ORANGE JUICE—quantities in No. 2 and 46os, cass. Bids due in Chicago by Dec. 18 (QM-11-009-51-1231, -1234 and -1235).

Sweet Chengine—quantities in No. 10 cans. Bids due in Oakland by Dec. 18 (QM-04-493-51-185).

Prans—quantities in No. 10 cans. Hids due in Oakland by Dec. 18 (QM-04-498-51-184).

BLACKERBBBB quantities in No. 10 cans. Bids due in Oakland by Dec. 19 (QM-04-403-51-186).

GRAPHRUIT—quantities in No. 2 cans. Bids due in Chicago by Dec. 19 (QM-11-009-5-1-1173). GRAPHRUIT JUEB—quantities in 46-oz. cans. Bids due in Chicago by Dec. 19 (QM-11-009-51-1179).

ORANGE JUICE—quantities in No. 2 and 46on, cans, Bids due in Chicago by Dec. 21 (QM-11-009-51-1232 and -1256).

## Convention Schedule

(Tentative)

Program details for the 1951 N.C.A. Convention are being worked out. As they are finalized they will be announced and added to this tentative schedule of principal events. The schedule of N.C.A. meetings as given below is subject to addition and revision.

Feb. 15-Budget Committee.

Feb. 16—Research Committee, Raw Products Committee, Labeling Committee, Convention Committee, Home Economics Committee, Buildings Committee, and Administrative Council luncheon and meeting.

Feb. 17—Fishery Products Committee, Resolutions Committee, Board of Directors: Executive Session (a.m.), Lunch (m), Open Session (p.m.); and Research Smoker.

Feb. 18—General Session and State Secretaries Dinner.

Feb. 19—Raw Products Conferences, Laboratory Conferences, Fishery Products Conference, and Raw Products Smoker.

Feb. 20—Joint Laboratory and Raw Products Conference.

## **STATISTICS**

## **Canned Baby Food Stocks**

Details of the canned baby food supply, stock and shipment situation, as reported by the Association's Division of Statistics, are presented below:

	1940	1950
	(thousands	of desens)
Capper stocks, Jan. 1	53,782	55,341
Pack, Jan. through Oct	99, 172	105,009
Supply		160,410
Canner stocks, Nov. 1		53, 124
Canner shipments, Oct	9,519	8,504
Cannor shipments, Jan.		
through Oct	103, 438	107, 286

## Stocks and Shipments Of Canned Fruits

Reports on canners' stocks and shipments of canned sweet cherries and on canners' stocks of canned peaches have been compiled by the Association's Division of Statistics, and complete reports have been mailed to all canners packing these items.

#### Sweet Cherry Stocks and Shipments

	1949-50 1950-51
	(cases-basis 24/235)
Carryover, June 1	65,000 316,000
Pack	1,678,000 741,000
Total supply	1,743,000 1,057,000
Stocks, Nov. 1	
Shipments during Oct	192,000 71,000
Shipments, June 1 to Nov. 1	883,000 517,000

#### Stocks of Conned Peaches

State	Nov. 1 1949	Nov. 1 1950
cettite	(actual	
Michigan	169, 189	205, 821
Southeast	11,877	21,844
Wash. & Ore	555, 485	118, 154
Calif.: Cling	12,063,062	7, 116, 685
Free	1, 124, 333	889,976
Other states	35, 112	34,989
U. S. Total	14, 559, 058	8, 387, 469

## **Canned Meat Report**

The quantity of meat canned and meat products processed under federal inspection during the four-week period October 1-28 is reported by the Bureau of Animal Industry as follows:

#### Canned Meat and Meat Products Processed Under Federal Inspection Oct. 1-Oct. 28, 1950\*

	3 lbs.	Under	
	& over	3 lbs.	Total
	(in the	ousand po	unds)
Luncheon meat	11,962	6,725	18,687
Canned hams	10,828	1.704	12,532
Corned beef hash	429	7,063	7,492
Chili con carne	1,295	10,089	11,384
Vienna sausage	75	4,959	5,034
Frankfurters and wieners			
in brine	6	1,002	1,008
Deviled ham		423	423
Other potted and deviled			
meat products	3	2,796	2,799
Tamales	146	3, 190	3,336
Sliced, dried beef	31	369	400
Liver products		91	91
Ment stew	30	3,650	3,680
Spaghetti meat products	222	4,008	4,230
Tongue (except pickled)	305	158	463
Vinegar pickled products	1,051	1,520	2,571
Bulk sausage		670	670
Hamburger	534	3, 157	3,691
Soups	2,011	37,890	39,901
Sausage in oil	172	234	406
Tripe	4	425	429
Brains		298	298
Hacon	40	1,394	1,434
All other products 20%			
or more meat	236	5,084	5,320
All other products less			
than 20% meat (ex-			
cept soup)	73	9,812	9,885
Total all products	29, 455	106,713	136, 168

<sup>\*</sup> Columns do not add to total shown in all cases since rounded figures are used.

## Pack of Canned Peaches by States, 1949 and 1950

	11	1949 1950		950
Michigan Southeast Washington & Oregon California: Cling. Free	(actual cases) 287,643 26,173 743,457 17,757,966	(basis 24/834) 272,214 26,165 736,800 16,524,717 1,499,127	(actual cases) 388, 846 31, 914 71, 393 15, 455, 292 1, 745, 615	(busic 34/834) 371, 950 31, 540 65, 976 14, 428, 886 1, 676, 930
Other states	77, 221	74,725	42,076	41,256
U. S. Total	20, 418, 669	19, 133, 748	17, 735, 136	16, 616, 538

Pack totals for California are preliminary.

## Wholesale Distributor Stocks of Canned Foods

Wholesale distributor stocks of canned foods, including those in warehouses of retail food chains, as reported by the Bureau of the Census this week, totaled 70 million cases on November 1, 1950, as compared with 51 million cases on November 1, 1949.

#### Stocks of Wholesale Distributors (including Warehouses of Retail Food Chains)

	All sizes smaller than No. 10		Institution sizes, all sizes No. 10 or larger		Total	
	Nov. 1 1949	Nov. 1 1950	Nov. 1 1949	Nov. 1 1950	Nov. 1 1949	Nov. 1 1950
	-		-(thousands o	factual case	s)	-
Vegetables:						
Beans, green and wax	3,215	4,005	744	976	3,959	4,981
Corn	6,544	7,497	546	751	7,090	8,248
Peas	5,736	7,673	666	977	6, 402	8,650
Tomatoes	5, 128	5,672	856	900	5,984	6,572
Asparagus	1,336	1,763	81	133	1,417	1,896
Beans, lima	1,229	1,573	134	202	1,363	1,775
Beets	1,148	1,375	285	394	1,433	1.769
Carrots	256	263	140	189	396	452
Tomato catsup and chili sauce	2.737	3,248	416	529	3,153	3.777
Fruita:		.,				
Apricots	886	986	178	284	1,064	1,220
Fruit eocktail 1	1.823	2.742	221	356	2,044	3,098
Peaches	4,282	5,410	657	859	4,939	6, 269
Pears	827	861	136	192	963	1,053
Pineapple	1,336	5, 188	177	583	1.513	5,771
Applesauce	642	1, 105	98	180	740	1,294
Cherries, red pitted	615	807	253	385	868	1, 192
Cherries, sweet	530	540	78	72	608	612
Grapefruit segments	325	487	7	10	332	497
Plums and prunes	337	342	95	100	432	451
Juices:			-			****
Tomato 9	3,255	4.490	175	207	3,430	4,706
Grapefruit	546	1.067	18	24	561	1,091
Orange	942	1.607	12	28	954	1,635
Citrus blend	439	690	7	6	446	696
Pineapple	751	2,453	25	45	776	2,498

<sup>1</sup> Includes fruit for salad and mixed fruits (except citrus). <sup>2</sup> Includes only vegetable juice combinations containing at least 70 percent tomato juice.

## RESEARCH

## Locker Plants Offer Fruit, Vegetable Processing Service

Customers of many freezer locker plants are being offered fruit and vegetable processing services, say agricultural engineers of the U. S. Department of Agriculture. Continuing success of experimentally developed locker plant processing kitchens as well as the increased interest of other locker plant operators points to more widespread services of this kind.

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A Michigan locker plant, cooperating with the Michigan Agricultural Experiment Station and the Bureau of Plant Industry, Soils, and Agricultural Engineering, offered such a service successfully in 1949. An equipped kitchen was set up in the locker plant for customers to use in processing garden and orchard produce for freezing. The plant operators also used the kitchen to process fruits and vegetables for resale.

Experimental studies of the equipment, layout, and operation of this kitchen were carried on as one phase of a project under the Research and Marketing Act of 1946. This research is designed to develop or adapt equipment especially for use in such kitchens. In the past, failures have often resulted directly from the fact that suitable equipment has not been available.

Success of the Michigan experimental venture can be partially measured by the 42,000 pints of fruits and vegetables patrons processed for freezing that first year, using the plant's facilities. The locker plant operators, for their part, found the experiment, that cost them 390 square feet of space and \$250 worth of equipment, making a good profit.

As the idea caught on, business increased. In 1950, customers using the plant's kitchen topped their 1949 output by about 10,000 pints of processed fruits and vegetables. Several other Michigan locker plants set up a similar service for their patrons this past year.

Customers found that with some locally grown produce they were getting fresh frozen foods for a price below what they would pay for comparable products at the local market. The service enabled them to keep their lockers and home freezers filled and, because of the efficient plant kitchen, they were able to do the job quicker and easier than they could at home.

The service kept lockers rented for the freezer plant operators, and their employees at work during the usually slack summer period. They sold more cartons, had a greater demand for sharp freeze service and kept their overflow bins filled. They added further profit by offering fresh fruits and vegetables for sale to their customers for processing, and by selling food they, themselves, processed in their kitchen.

### Big Yields of Mushrooms

Mushroom growers today are getting twice as big yields of mushrooms per square foot of bed as they were getting in the 1920's, according to Dr. E. B. Lambert of the Plant Industry Station, U. S. Department of Agriculture. Most of this gain has come from better disease control, better varieties, and better methods of pasteurizing the compost after it is put on the shelves in the propagating beds.

Now an annual 60,000,000-pound business in this country, mushrooms have more food value than is ordinarily supposed, Dr. Lambert says. As a matter of fact, they are higher in riboflavin (vitamin B<sub>2</sub>) than any other plant, except yeast.

## **STANDARDS**

## Text of FSA Announcement on Proposal To Amend Standards For Fruit Preserves, Fruit Jellies, and Fruit Butters

The following notice was published in the Federal Register of November 28:

FEDERAL SECURITY AGENCY

Food and Drug Administration [21 CFR, Parts 29, 30] [Docket No. FDC-10(a)]

Fruit Preserves, Fruit Jellies, and Fruit Butters

Notice of Hearing To Amend Definitions and Standards of Identity

In the matter of amending the definitions and standards of identity for fruit preserves, fruit jellies, and fruit butters:

Notice is hereby given that the Federal Security Administrator, upon application of the National Preservers Association, representing a substantial portion of the interested industry, in accordance with sections 401 and 701 of the Federal Food, Drug, and Cosmetic Act (52 Stat. 1046, 1055; 21 U. S. C. 341, 371), will hold a public hearing commencing at 10:00 o'clock in the morning of January 2, 1951, in room 5439, Federal Security Building, Independence Avenue and Fourth Street S. W., Washington, D. C., for the purpose of receiving evidence upon proposals to amend the regulations fixing and establishing definitions and standards of identity for fruit preserves, fruit jellies, and fruit butters (21 CFR 29.0, 29.5, 30.0).

At the hearing, evidence will be restricted to testimony and exhibits relevant and material to such proposals. The hearing will be conducted in accordance with the rules of practice provided therefor. Mr. Bernard D. Levinson is hereby designated as presiding officer to conduct the hearing in place of the Administrator, with full authority to administer oaths and affirmations and to do all other things appropriate to the conduct of the hearing. The presiding officer is required to certify the entire record of the proceeding to the Administrator for initial decision.

The amendments proposed by the National Preservers Association are set forth below and will be considered at the hearing. The proposed amendments are subject to adoption, rejection, or modification by the Federal Security Administrator, in whole or in part, as the evidence adduced at the hearing may require.

 Section 29.0 Preserves, jams; identity; label statement of optional ingredients, is proposed that this section be amended:

a. By deleting from § 29.0 (d) (4) the words "corn sugar or".

b. By deleting § 29.0 (d) (5) and substituting therefor a new subparagraph, as follows:

(5) Any combination of corn sirup, glucose sirup, corn sirup solids, or any two or more of the foregoing with optional saccharine ingredient (1), (2), (3), or (4) in which the weight of the solids of corn sirup or glucose sirup or both does not exceed one-fourth of the total weight of the solids of the combined saccharine ingredients.

c. By deleting § 29.0 (e) (4) and substituting therefor a new subparagraph, as follows:

(4) The term "corn sirup" means a clarified, concentrated aqueous solution of the products obtained by incomplete hydrolysis of cornstarch. The solids of corn sirup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. The term "corn sirup solids" means dried corn sirup. The term "glucose sirup" means a sirup which conforms to the definition in this subparagraph for corn sirup, except that it is made from any edible starch.

d. By deleting from § 29.0 (g) (3) the words "(d) (5) or".

2. Section 29.5 Fruit jelly; identity; label statement of entional ingredients, is proposed that this section be mended.

a. By deleting from § 29.5 (d) (4) the words "corn sugar or".

b. By deleting § 29.5 (d) (5) and substituting therefor a new subparagraph, as follows:

(5) Any combination of corn sirup, glucose sirup, corn sirup solids, or any two or more of the foregoing with optional saccharine ingredient (1), (2), (3), or (4) in which the weight of the solids of corn sirup or glucose sirup or both does not exceed one-fourth of the total weight of the solids of the combined saccharine ingredients.

c. By deleting § 29.5 (e) (4) and substituting therefor a new subparagraph, as follows:

(4) The term "corn sirup" means a clarified, concentrated aqueous solution of the products obtained by the incomplete hydrolysis of cornstarch. The solids of corn sirup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. The term "corn sirup solids" means dried corn sirup. The term "glucose sirup" means a sirup which conforms to the definition in this subparagraph for corn sirup, except that it is made from any edible starch.

d. By deleting from § 29.5 (g) (4) the words "(5) or".

 Section 30.0 Fruit butters; identity; label statement of optional ingredients, is proposed that this section be amended:

a. By changing that part of § 30.0 (d) which follows subparagraph (5) thereof so that as changed it becomes:

(6) Any combination of two or more of optional saccharine ingredient (1), (2), (3), and (4).

(7) Any combination of dextrose and optional saccharine ingredients (1), (2), (3), (4), or (6).

(8) Any combination of corn sirup, glucose sirup, corn sirup solids, or any two or more of the foregoing with optional saccharine ingredient (1), (2), (3), (4), (6), or (7) in which the weight of the solids of corn sirup or glucose sirup or both does not exceed one-fourth of the total weight of the solids of the combined saccharine ingredients.

(9) Any combination of honey and optional saccharine ingredient (1), (2), (3), (4), (6), or (7), in which the weight of the solids of each component except honey is not less than one-tenth of the weight of the solids of such combination, and the weight of honey solids is not less than two-fifths of the weight of the solids of such combination.

b. By deleting § 30.0 (e) (5) and substituting therefor a new subparagraph, as follows:

(5) The term "corn sirup" means a clarified, concentrated aqueous solution of the products obtained by the incomplete hydrolysis of cornstarch. The solids of corn sirup contain not less than 40 percent by weight of reducing sugars calculated as anhydrous dextrose. The term "corn sirup solids" means dried corn sirup. The term "glucose sirup" means a sirup which conforms to the definition in this subparagraph for corn sirup, except that it is made from any edible starch.

e. By deleting § 30.0 (g) (4) and substituting therefor a new subparagraph, as follows:

(4) When optional saccharine ingredient (d) (5) of this section is used the label shall bear the statement "Prepared with Honey."

d. By deleting § 30.0 (g) (5) and substituting therefor a new subparagraph, as follows:

(5) When optional saccharine ingredient (d) (9) is used the label shall bear the names of the components of the combination whereby such components are designated in paragraph (d) of this section in the order of predominance, if any, of the weights of such components in the combination. Such name shall be preceded by the words "Prepared with."

Dated: November 20, 1950.

OSCAR R. EWING, Administrator.

[F. R. Doc. 50-10703; Filed, Nov. 27, 1950; 8:46 a. m.]

## **CONGRESS**

## Statement by Dr. E. J. Cameron of N.C.A. before the House Committee to Investigate the Use of Chemicals in Food Products

Following is the full text of the statement by Dr. E. J. Cameron, Director of the N.C.A. Washington Research Laboratories, before the select House Committee to Investigate the Use of Chemicals in Food Products, on December 1:

This statement concerns the added chemical problem as it relates to food products commonly thought of by the consumer as "canned foods." The simplest definition for canned foods seems to be that which is incorporated in the bylaws of the National Canners Association under which they are those foods which are "... packed pri-marily for human consumption in hermetically sealed containers and sterilized by the use of heat. . " It will be seen that this definition excludes dry foods which are merely packed in cans, even though the latter may be hermetically sealed. On the other hand it technically includes certain products the preservation of which depends in some degree on factors other than the heat they receive; for example, in jams, jellies, and preserves the high sugar content accomplishes most of the task of preservation; hence we do not think of these as typical canned foods. The principal classes of canned foods are fruits, vegetables, fruit and vegetable products (includ-ing juices, source and other recipiing juices, soups, and other special-ties), meats, milk, and fish.

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Your Committee has heard the views of a number of competent witnesses on a suitable working definition of "chemicals." It appears that at one extreme every material thing in the universe is composed of chemicals; at the other extreme the term might be limited to synthetic laboratory products not found in nature. At this stage it is probably not imperative to set the limits of the term too closely, and by the same token I will not attempt to draw fine distinctions in regard to the ingredients of canned foods.

The canning industry certainly is not accustomed to thinking of canned foods as chemicalized products. The basic principle of their preservation—sterilization by heat—makes the use of preservatives unnecessary. At the same time canned foods cover a wide range of types, and therefore of ingredients. Among the ingredients and substances used in preparation are some which might be classified as chemicals in the broad sense that they are chemical substances extrinsic to the food with which they are used, even though they may be substances which occur naturally in one food or another. These will be described later in this statement.

As I understand it, a purpose of new legislation that may be recommended as a result of these hearings would be to assure advance approval of chemical additives by the Food and Drug Administration rather than to rely upon the food standardization procedure under Section 401 to screen those chemicals already in use or those which may be suggested in the course of standardization. However, this problem of control would appear to have been met in the case of foods now covered by standards of identity. The problem has been met also where industry practices are subject to strict and constant government control—as is the case in the meat industry.

Previous testimony has touched on the extent to which the problem of chemicals in foods may or may not be met by the standard-making procedure set up under Section 401 of the Federal Food, Drug, and Cosmetic Act of 1938. It is interesting to note that in the 12 years since the enactment of that law more of these standards have been established for canned foods than for any other comparable class of foods. This is understandable when we recall that the standardization provision in the present Act is modeled in part on the McNary-Mapes Amendment to the 1906 Act. That amendment was drafted at the suggestion of the canning industry and applied only to canned foods. Under it standards of quality were set up for a number of canned foods and there was thus a body of experience in that field when the new law went into effect.

For products which have been standardized under the new Act all permitted ingredients have been considered in the hearings on which such standards were based; any ingredients proposed in the future would have to be considered in the same way before they could be used. Thus, ingredients have already been screened for those canned foods which have been standardized and these constitute a major part of the pack.

If we go on to examine the unstandardized segment of the pack we find that in a substantial part of it the question of unregulated use of chemical ingredients does not arise except in the most speculative sense. Canned fruits, for example, are simple products; they consist of fruit in sugar syrup, fruit juice, or water. Chemical ingredients have not been proposed for use in those already standardized and are not any more likely to be for those not yet standardized. Among the seasonal vegetables the only un-

standardized items listed are mixed vegetables, pumpkin, and squash. The first consists of mixtures of canned vegetables individually standardized, and the other two have only one ingredient each, so that the problem of identity does not call for early standardization. The same consideration applies to fruit juices and miscellaneous vegetable juices. Canned seafoods are as a class simple products but are as yet hardly touched by the standardization program.

Finally, canned meats are under rigid control of composition and labeling by the Bureau of Animal Industry which enforces the Meat Inspection Act. On this important class of canned food advance screening of all proposed ingredients is already in effect.

Taking these factors into account, we can add to the standardized products those which are of substantially identical nature, those which are too simple to have made standardization urgent, and the canned meats which are controlled in another manner. This considerably reduces the portion of the total pack as to which the standardization program does not now give direct control or a clear indication of what might reasonably be expected in the way of proposed ingredients.

In presenting this analysis to your Committee there is no intention to suggest that the problem of chemicals in foods is one to which the canning industry is indifferent. It does show, however, that the area of interest is limited by the intrinsic nature of most canned foods and by the controls already in effect, and it serves further to bring into proportion the discussion of individual products and ingredients presented elsewhere in this statement.

Before describing the several classes of canned foods with respect to their ingredients, it may be helpful to consider these ingredients in a general way. The most obvious division is into major and minor constituents. The major constituent is usually some item of food—fruit, vegetable, etc.—which determines the identity of the product. The minor constituents may be condimental (salt, sugar, spices, flavoring), acidulants to assist in processing, ingredients which promote retention of form or appearance, or substances such as vitamins added to enhance nutritive value. They may be added by themselves, or in liquid packing medium, or in certain instances may be used in preliminary preparation of the food for canning.

In most of what follows, I have adopted an illustrative rather than an exhaustive treatment, since the latter would make this statement too long and diffuse. However, I shall be happy to amplify any points in which the Committee is interested.

The main classes of canned foods and their ingredients are discussed in the following paragraphs:

#### FRUITS

These require little description. They consist generally of a fruit or mixture of fruits in a liquid packing medium. The latter may be a sugar syrup, fruit juice, or water. In certain fruits deficient in natural acid, a small amount of citric acid is sometimes added. Another instance of a chemical ingredient that comes to mind is the use of a calcium salt dip for apples preliminary to canning. This has been proposed to secure better retention of firmness in the canned product, and the Food and Drug Administration has approved its use with certain provisos, namely that momore than a trace of the calcium salt may remain in the canned product, and that must be declared on the label. Also, the use of saccharin in certain diabetic packs has recently been authorized in temporary permits issued by the Federal Security Administrator.

#### VEGETABLES

Some of these are the subjects of individual standards of identity wherein the permitted ingredients are specified; a large group of others are covered similarly by a blanket standard. The latter includes "citric acid or a vinegar" for such of these vegetables as may need acidification to facilitate sterilization. Artichokes, for example, are always acidified; otherwise the process required for sterilization would ruin the product. Onions also are frequently acidified to permit milder processing and consequently better color.

The standards of identity for canned tomatoes and canned white potatoes permit use within a stated limit of calcium chloride, sulfate, citrate, or phosphate to provide better retention of the original firmness of those vegetables. There is abundant evidence that these salts are harmless, but they are, of course, chemicals in the broad sense even though they occur naturally in foods. Mention has already been made of a similar use of calcium salts in canned apples.

The standard of identity for tomato paste includes in the list of optional ingredients the following statement: "It may contain, in such quantity as neutralizes a part of the tomato acids, the optional ingredient: (7) Baking soda."

Canned peas ordinarily consist only of shelled peas with water, sugar and salt as packing medium and seasoning. There are, however, three patented processes which have been used to a very limited extent, involving the use of certain chemicals to give better retention of the original green color by preventing breakdown of the natural chlorophyll. The three methods differ in detail, but they have the

common feature of treating the peas with dilute alkali prior to canning, and adding to the liquid portion of the contents a trace of magnesia or magnesium carbonate. The merits of these methods have been thoroughly explored in standards hearings at which satisfactory evidence was produced that the treatment is harmless and does not impair the nutritive value of the product.

While on the subject of canned peas, mention may be made of use of artificial color in this product. This has been done to only a small extent, primarily for export. In the domestic market such colored peas must be labeled "Below Standard in Quality," even if of high quality, and this limits their acceptance. Use of artificial color in canned products is rare; when used, the colors have to be those certified as safe by the Food and Drug Administration acting under Section 406 of the Food, Drug and Cosmetic Act, and, of course, must be declared on the label.

FRUIT AND VEGETABLE PRODUCTS (Juices, baby foods, soups, catsup and chili sauce).

Although this group includes a wide range of products, it affords very few examples of so-called chemical ingredients. In fact only one such example occurs to me. This is the use of monosodium glutamate as an ingredient in soups and possibly some other specialties. Monosodium glutamate is one of the principal constituents of soy sauce, which has been made for centuries in the Orient by mold fermentation of soy beans. The pure ingredient is now largely made by acid splitting of vegetable proteins, e.g. wheat, soy bean, or beet protein. The use of this ingredient is sanctioned by the Food and Drug Administration, which, in fact, has announced that in label declarations monosodium glutamate need not be described as an artificial flavoring.

#### MEATS

Although none have been standardized under the Food, Drug and Cosmetic Act, canned meats must conform to requirements established by the Bureau of Animal Industry which enforces the Meat Inspection Act. That agency exercises strict control over formulation and ingredients of canned meat products to ensure their wholesomeness and controls are enforced by inspection supervision in meat canning plants. Chemical preservatives are not permitted, but in the familiar types of cured meat curing salts are used in the amounts and manner specified in the Meat Inspection Regulations.

#### MILK

A standard of identity exists for evaporated milk which states that it may contain (Sec. 18.520 (a)(1)) "Disodium phosphate or sodium citrate or both, or calcium chloride, added in a total quantity of not more than 0.1 percent by weight of the finished evaporated milk." These are harmless salts added to adjust the "salt balance" of the product and prevent curding. The standard also permits ((a)(2)) "Vitamin D in such quantity as increases the total vitamin D content to not less than 7.5 U.S.P. units per avoirdupois ounce of finished evaporated milk."

#### SEAFOODS

In some instances canned scafood consists only of fish flesh and salt; in others a liquid packing medium is added, such as salt solution, vegetable oil, or a sauce (for example, tomato sauce or mustard sauce in sardines). In preparing the meat of some crustacea for canning, an acid dip (vinegar, dilute acetic acid or citric acid) is sometimes used to prevent subsequent discoloration. A development of recent origin consists of the addition of a small amount of sodium hexametaphosphate to a canned pureed seafood to prevent formation of socalled triple phosphate crystals from the constituents of the seafood. The added ingredient, one of a group of substances known as glassy polyphosphates, is a modified form of sodium phosphate. I am informed that satisfactory evidence of its safety has been furnished to the Food and Drug Administration which has no objection to its use.

#### Posticidos

The problem of pesticides, particularly certain new synthetic insecticides, is one that affects all agricultural products for food use regardless of the form in which they may be marketed. Fresh, frozen, and canned fruits and vegetables are affected in varying degrees. From a public health standpoint the presence of such residues would be expected to offer greatest hazard in the marketing of fresh fruits and vegetables where the consumer may eat the product with little or no attempt being made to cleanse it. Where the food is processed, preparatory treatment may satisfactorily remove certain residues, such as the arsenicals, but only partially remove others, such as the organic insecticides benzene hexachloride and DDT.

The unavoidable presence of pesticide residues is regarded as the most important facet of the "added chemical" problem as it pertains to canned foods. At great cost, residue removal studies have been in progress in the industry for several years and are being continued. Yet no properly informed person would claim complete removal of the residues of all pesticides that are now in use. The consumer and the food industry alike would benefit from knowledge concerning the toxicological properties of pesticides and their residues before they are used for food crops.

It is expected that the findings of the recent Food and Drug hearing on pesticides will clarify thinking on this subject and provide technological guidance for food processors. But such regulations as may be announced will apply only to those pesticides that were considered at the hearing and, presumably, will be subject to change where new toxicological evidence may become available.

The great number of pesticides in present use results largely from research developments of the past few years. If we take this experience as a guide we may expect that in the next few years manufacturers will produce many more such chemicals, particularly in the chlorinated hydrocarbon and organic phosphate groups. Under existing procedure these additions to the pesticide list would probably cause another pesticide hearing to be called within a few years. I am convinced that those who expended time and money to the extent required by the recent hearing would not look complacently to a repetition a few years hence. Nor would they care to face another period of doubt concerning official attitude on new pesticides pending such a hearing.

If new legislation of the kind under consideration could be applied effectively to an advance screening that would lead to approval of particular pesticides, food processors would be relieved of certain very definite worries incident to the unregulated use of such compounds. The availability of specific information regarding permitted use and tolerances would make possible intelligent adjustment of horticultural and processing practices to meet the public health objectives.

It is recognized that the pretesting of pesticides on the large scale that is indicated by the recent developments in this area would be time consuming and expensive. Nevertheless, adoption of a new pesticide should be predicated on reasonable evidence that its use does not create a health hazard. Otherwise the advance in horticultural practice that is promised by use of the pesticides may be in conflict with public health considerations.

#### Antiblotics

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A recent interesting development in the field of antibiotics provides material for speculative analysis of existing authority under the Act and of the extended powers that would be provided by a protective amendment.

Late in 1949 the Bureau of Agricultural and Industrial Chemistry of the U. S. Department of Agriculture announced certain results of an investigation in which an antibiotic known as subtilin was used, together with mild heat, in attempts to sterilize vegetables and certain other products which are commonly processed with high temperature heating (230°F.-250°F.). The release (December 29,

1949) was optimistic about future use of this antibiotic in the field of food preservation.

A later release (May 17, 1950) went considerably beyond the implications of the first and claimed specifically that subtilin will destroy Clostridium botulinum, "potentially most lethal of food poisoning organisms."

This organism is the only spore forming (heat resistant) type in the category of food poisoning bacteria and the only one of public health importance in relation to preservation by canning. At one time (1915-1924) botulism constituted a major problem in the industry, which was met by putting protective heat processing on a rational basis through scientific investigations in the laboratories of the industry. There has been only one proved outbreak of botulism from commercially canned foods packed in this country since 1924, which testifies to the efficiency of the improved technology resulting from industry research.

The interest of the industry naturally was attracted by the first release on subtilin and was heightened considerably by subsequent publicity, particularly by the May release. Inquiries came to us, orally and by correspondence, from persons interested in the prospects for using subtilin in the near future and some canners wanted to know where it could be obtained for immediate use.

Following the December announcement we undertook independent investigations in our own laboratories after obtaining small amounts of subtilin from the U. S. Department of Agriculture and from two manufacturers of antibiotics. This work has culminated in experimental packs that were prepared during the 1950 season. At this point, for the purposes of this statement, it seems sufficient to summarize current findings by saying that (1) the subtilin treatment is not effective in destroying spore forming bacteria that may cause spoilage in canned foods, (2) it will not destroy the spores of Cl. botulinum, (3) its use would create a public health hazard both in commercially and home canned foods.

Since it has been shown that subtilin will not effectively destroy the spores of Cl. botulinum and that its use would create a hazard to health, one State, California, has ruled against its use by canners coming under State inspection. I am informed, however, that it is not clear whether the Federal Food, Drug, and Cosmetic Act offers sufficient protection against its use in unstandardized canned foods for interstate shipment. The fact that this antibiotic is not now commercially available probably constitutes the principal safeguard against its indiscriminate use in commercially and home canned foods. Should subtilin become available a positive deterrent would be

needed to prevent its use in canned foods which are subject to Federal authority.

Certain facts have emerged from the subtilin investigations which strongly encourage further exploration of the antibiotic field to attempt to discover an antibiotic that will accomplish what was claimed for subtilin. I think it quite likely that significant developments in this field will come to light within the next few years. From this viewpoint it is logical to consider what controls presently exist against the premature use of an antibiotic which has a sterilizating effect, should any such be found.

Antibiotics may be toxic by ingestion. Continuous use may interfere with the action of beneficial intestinal bacteria. Moreover, such use may create bacterial strains which are resistant to the antibiotic and this might constitute a clinical disadvantage if it became necessary to use the antibiotic therapeutically. To assure safety of use as a sterilizing agent the antibiotic would have to be tested for all of these properties.

Antibiotics could not presently be used legally in any canned food now covered by standards of identity because antibiotics are not included as optional ingredients. Thus, use in vegetables and milk would be prohibited. Use in canned meats would be under the control of the Bureau of Animal Industry. There would be no point in using antibiotics in fruits as a supplement to mild heat because the heat treatment itself would be sufficient for preservation.

Thus the product groups that would have to be considered specially would include only the low-acid non-seasonal and vegetable specialties, and seafoods. Compared with the total pack these exceptions would represent only a small fraction.

However, in this limited segment there are canned food groups that are important and which normally might not come up for standardization for several years. In such circumstances the existence of protective authority of some kind would appear to be needed, if it is not furnished by the present terms of the Act.

#### Conclusion

In presenting this statement I have attempted to analyze the "added chemical" problem from the standpoint of the canning industry. In doing this I have suggested that new legislation is not pertinent in the case of chemicals intentionally added to canned products already standardized and canned meats which as a group are under continuous control in their production. I have cited our special interest in the subject of insecticides and have indicated a new development which may be considered hypothetically illustrative of problems which may call for protective treatment.

## Clayton Act Amendment

(Concluded from page 329)

dent listed the following "legislation of greatest urgency," in this order: Supplemental appropriations, tax legislation, emergency aid to Yugoslavia, rent control, and statehood for Alaska and Hawaii.

The Alaska statehood bill, H. R. 331, which has already been passed by the House, was the subject of debate in the Senate when it convened this week.

H. R. 2784 was listed by the White House among "other legislation which the President believes should be passed if possible."

H. R. 2734 was passed by the House August 5, 1949, and later was the subject of hearings by a Senate Judiciary subcommittee. The N.C.A. filed a statement with the subcommittee proposing an amendment intended to make clear the Congressional intent with respect to the term "assets."

However, the Senate Judiciary Committee approved the House-passed bill substantially without change and sent it to the Senate floor on May 22 of this year.

## **PERSONNEL**

## Michigan Canners Association

All officers of the Michigan Canners Association were reelected at the association's annual fall meeting. They are:

President—Harvey W. Norris, Crystal Canning Co., Frankfort; vice president—A. Edward Brown, Michigan Fruit Canners, Inc., Benton Harbor; and secretary-treasurer—Reed M. Roberts, Grand Rapids.

#### **New Association Members**

The following firms have been admitted into membership in the N.C.A. since November 11, 1950:

CALIFORNIA TUNA CANNING COMPANY, 1590 S. 28th St., San Diego 13, Calif. Product— Tuns. Officers—Earl M. Nielsen, president; Frank Rouse, vice president; and W. L. Robinson, secretary-treasurer.

PINE GROVE CANNING COMPANY, INC., P. O. Box 191, 8t. Martinville, La. Products—Green and wax beans, beets, corp. corn and okra and tomatoes, okra, okra and tomatoes, pepper products, sweet potatoes. Officers—Leonce Durand, president; Leonce P. Durand, Jr., secretary-treasurer.

San Diego Packing Co., 2305 E. Belt St., San Diego 2, Calif. Product—Tuna. OfficersEarl M. Nielsen, president; W. L. Robinson, vice president; Richard Fenton, secretary and treasurer; and Glen D. Martin, assistant secretary and manager.

YAKIMA COUNTY HONDIQUITURAL UNION, P. O. Box 1687, Yakima, Wash. Factory—Sunny-side, Wash. (for duration of 1950). Products—Apples, applesauce, apricota, sweet cherries, peaches, pears, and plums. Officers—Walter M. Kohagen, president; Charles H. Bailard, cannery sales manager.

## lowa-Nebraska Canners Assn.

The Iowa-Nebraska Canners Association elected the following officers recently at the association's annual convention:

President—Leo Gleason, G & M Food Products, Des Moines; vice president—John Martland, Green Giant Company, Vinton, Iowa; and secretary-treasurer—Roy Chard, Audubon, Iowa (reelected).

## DEFENSE

## NPA Orders on Copper

NPA on November 29 issued Orders M-11 and M-12 relating to copper and copper-base alloys. M-11 provides rules for accepting and scheduling "DO" orders for copper products. M-12 reduces civilian use of copper by 15 percent. Both orders become effective January 1, 1951.

## **Wage Stabilization Board**

President Truman on November 25 completed the establishment of a Wage Stabilization Board under the Defense Production Act. He announced the appointment of eight board members who will work under Cyrus Ching, director of the Federal Mediation and Conciliation Service, who had been named chairman in early October.

The eight new members represent the public, labor, and business and industry. They are:

Public-John Dunlop, Harvard University; and Clark Kerr, University of California.

Labor—Harry C. Bates, Bricklayers International Union (AFL); Emil Rieve, Textile Workers Union of America (CIO); and Elmer E. Walker, International Association of Machinists (independent).

Industry—Henry Bradford Arthur, manager of commercial research for Swift & Co.; J. Ward Keener, B. F. Goodrich Co.; and Reuben B. Robertson, Jr., Champion Paper & Fibre Co.

The Wage Stabilization Board was created administratively by the President's Executive Order 10161 of September 9. Section 403(b) of that order states:

"The Wage Stabilization Board shall make recommendations to the [Economic Stabilization] Administrator regarding the planning and development of wage stabilization policies and shall perform such further functions with respect to wage stabilization as may be determined by the Administrator after consultation with the Board."

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